

### ABSTRACT

An apparatus to render the shield of a ball bearing unnecessary and to improve the lubricity inside a fan motor is presented. A bearing housing is integrally formed with a base of the fan motor, and a shield part is formed at one end of the bearing housing. A ball bearing, spacer and sleeve bearing are set inside from the other end of the bearing housing, and these are fixed in place by pressing in a retainer cap. The interior of the bearing housing is then shielded at each end by the shield part and the retainer cap, making the need for a shielded ball bearing unnecessary. A rotational shaft, to which a rotor and impeller are attached, is supported by the ball bearing and the sleeve bearing. Inside the bearing housing, lubricating oil passes back and forth between the ball bearing and sleeve bearing, thereby enabling the elimination of insufficiencies in lubricating oil, and improving lubricity.